

# THE RACING DRIVER

DENIS JENKINSON'S NEW BOOK, SUBTITLED "THE THEORY AND PRACTICE OF FAST DRIVING," IS AN EXCEPTIONAL CONTRIBUTION TO THE UNDERSTANDING OF RACE DRIVERS AND THE ENJOYMENT OF THEIR PERFORMANCES. IT WILL BE PUBLISHED IN THE U.S. ON MARCH 16 BY ROBERT BENTLEY, INC. (993 MASSACHUSETTS AVENUE, CAMBRIDGE 38, MASS.; \$5). BY SPECIAL ARRANGEMENT WITH THE PUBLISHER, WE PRESENT SOME PRE-PUBLICATION EXCERPTS.

**RECORD LAPS.** When he [our Grand Prix driver] cuts a wheel into the grass on the inside of the corner he is not only making his "line" through the corner a straighter one than before, and therefore a shorter one, he is also using the change of surface to give him a different "feel" of what the front tires are doing. By doing this he can sense more accurately how close to the limit of adhesion his front tires are, or how far beyond the limit they are. A change of surface, even to an inferior one, will give a sensitive driver a good indication of the surface he has just left, namely the tarmac road, and allow him to anticipate the actions of the tires when they regain the tarmac. On some circuits, the Nurburg Ring in particular, the roads are edged with grass banks in lots of places and the clever driver will have noticed all the points at the exits of the corners where the bank is vertical and clean. Then, if he is teetering between nine-and-a-half tenths and ten tenths on this corner [Jenkinson uses a scale in which ten tenths represents the ultimate], he can return to nine-and-a-half by letting the rear wheel strike the bank and thus check what seemed to be a wayward flight. This may sound brutal and rough on the car, but believe me, when a Grand Prix driver is out for the last couple of tenths of seconds, he becomes brutal and rough.

**"Tiger."** It is when the racing man is provoked or up against seemingly overwhelming odds that you see "tiger," but it is surprising how few racing drivers are capable of it. I say capable, but perhaps that is the wrong word for I do not think it a conscious action at all, for the circumstances are usually such that if the driver was to think about them for a moment he would stop immediately. It is essentially an automatic reflex action, which works only to certain stimuli, and a driver will either automatically "tiger" or he never will.

[When Stirling Moss] left Rome in the lead of the 1955 Mille Miglia, he metaphorically spat on his hands and "tigered" for the next 450 miles all the way back to Brescia determined, having got the lead, to hold on to it—Fangio, Taruffi, Kling, Maglioli, come who may. He did the same thing at Syracuse in 1957 as well, after losing the lead through mechanical trouble. He restarted with no hope of winning, but he "tigered" in a big way, because a challenge had been thrown down, and such a driver can seldom turn his back on a direct challenge. He broke the lap record time and again, and finished third in one of his most brilliant drives. The late Archie Scott-Brown—there was a real "tiger"; no matter what the circuit or the car, you could almost see his fangs and claws outstretched as he raced continually on the limit. Then, of course, there is the "Old Man himself," Juan Fangio. Who will ever forget his Nurburg Ring drive in 1957, when he caught Hawthorn and Collins as though they were a couple of amateurs? But equally, the last lap of that race saw Hawthorn really "tiger," for Fangio passed him by going on the inside of a left-hand bend, so that Hawthorn had to move aside, and in doing so he hit the bank. He hung on to the Champion for the rest of that lap and the final one, finishing only 3 seconds behind, whereas he had been losing more than 10 seconds a lap.

I think it is true to say that a well balanced, placid man will never make a World Champion; he could be a brilliant driver and strategist but would lack that little bit of dash and daring that would take him to the top. Don't think for a moment that drivers, the good ones especially, are a mean-minded bad-tempered lot, for that would be quite wrong. They do not lose their temper with an individual or with the car, but rather with a situation, and when all reasonable logic should say, "That's it; there is nothing you can do about it," something inside of them says, "That is where you are wrong, I'll show you what can be done about it"—and then you see "tiger."

**"Moments."** The ability to remain in control of all your faculties when the unexpected happens can not only minimize the injury but can be used to avoid accidents at times, and this brings us to a most interesting faculty in the human animal which is not peculiar to racing drivers, in fact it is not really essential for a good driver, but if he has it then he will find life a lot simpler, especially when he "overcooks things" and gets into difficulties. This quality is his sense of position in space. [A description of the body's proprioceptive system follows in the book.]


At Spa some years back Maurice Trintignant borrowed a Ferrari for a few laps practice. He was going up the climbing sweep of L'Eau Rouge bend when the two rear wheels lost adhesion and he spun through two complete revolutions at some 70 miles per hour, and through the final 90° the car had almost lost all forward momentum. Trintignant had stalled the engine on the first spin, but as the car reached the end of its movement he realized that it was going to finish up pointing in the original direction of travel, and also slap in the middle of the road. As the nose of the car slid around to complete the second 360° turn he banged the gear lever into bottom, took his foot off the clutch, started the engine and drove on. Afterwards I talked to him about the incident and he recounted the whole movement of the car from beginning to end, and described exactly the moment when he realized that he could restart the engine and carry on the way he had been going.

This is the sort of incident that is often described as "presence of mind" but in fact it depends on the accurate receiving and understanding of positional information; and well coordinated muscular responses resulting from these.

**"Speed happiness."** There are drivers who become frightened, but they do not

reach the top and seldom race for very long, and also the top drivers often suffer from a tensed nervous system, especially before a race, but this is an entirely different thing and is really quite a good safety valve. Without this a driver is liable to get into a "speed happy" state. The great Argentinian driver Froilan Gonzalez was probably as good an example as any of a "speed happy" driver.

It has been suggested that this type of personality may react to the stimulus of speed, either through the medium of the eyes, or through the body feeling wind pressure on it, and that being thus stimulated it becomes satisfied, and produces a relaxed mental condition. The world's greatest drivers can deliberately transgress the limit on a corner and, because the action is deliberate and calculated, they can return from it, as their self-preservation instinct tempers their action with a degree of caution. The "speed happy" ones are oversatisfied by reason of the speed, and the subsequent dulling of the self-preservation instinct allows them to go into the danger area of the limits of cornering so that they enter this phase without being wholly aware of it, and sometimes they can retreat, if the satisfaction is reduced at his point, but at other times they cannot retreat and then they crash.

**Power control of the rear end.** Moss and one of his teammates were discussing a 100-mph bend, and Moss was maintaining that the [Mercedes] W-196 took it in a long oversteer, which was perfectly correct, and that when he reached the limit of adhesion he put his foot hard on the throttle in order to prevent losing the tail of the car completely, this action bringing the rear more in line with the front, so that he ended the corner on full throttle with the tail no longer sliding outwards. [Moss's teammate then insisted that he *lifted* his foot] and the tail came in again. Obviously one of them was wrong, and after a time it became clear that the two drivers had different ideas about what was the limit of adhesion of the rear wheels. Moss was obviously reaching breakaway point on the rear tires, whereas his companion was some two or three degrees below breakaway, and due to his lower sensitivity he only *thought* he was at maximum cornering force. At the lower cornering force which he considered the limit, lifting his foot from the throttle would merely increase the drag component of the cornering force and slow the car down, so that application of steering lock would bring the tail inwards. However, if this driver had reached the maximum cornering force and had still insisted on lifting his foot, the tail would have swung viciously outwards. With Moss at the wheel the car would have maintained equilibrium on the point of breakaway. 

JULIUS WEITMANN

